

S. Hashemi

Re-run

1637


 RECEIVED  
 ENTER 1600/2002

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/692,257A

DATE: 07/09/2002

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

C--&gt;

ENTERED

1 <110> APPLICANT: Miller, Philip W.  
 2 Peng, Ming  
 3 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With  
 4 Plants  
 5 <130> FILE REFERENCE: 38-21(15771)B  
 6 <140> CURRENT APPLICATION NUMBER: US/09/692,257A  
 7 <141> CURRENT FILING DATE: 2000-10-19  
 8 <150> PRIOR APPLICATION NUMBER: US 60/162,747  
 9 <151> PRIOR FILING DATE: 1999-10-28  
 10 <160> NUMBER OF SEQ ID NOS: 14882  
 12 <210> SEQ ID NO: 1  
 13 <211> LENGTH: 488  
 14 <212> TYPE: DNA  
 15 <213> ORGANISM: Zea mays  
 16 <220> FEATURE:  
 17 <223> OTHER INFORMATION: Clone ID: LIB3136-003-D6-F1A  
 18 <400> SEQUENCE: 1  
 19 cctaaaaata gtttcgtata tatccggatc tggattaca atagtaacac gtgttttgtt 60  
 20 gtggtacaaa taatacgtcc cgagtcggat aaatcttccg atctccaata acagtgtacg 120  
 21 tacatacctg catggcacga aattatgcag ttcacatcatgg actggaacgg agcgggtgtgt 180  
 22 aaaagcgagc gcgctactgg taataatagc gtactgctgg gggggtatct tggctggctg 240  
 23 catccaattc caacaacaat gatgtggtgt tgggtggtggc tacggaagga cggggggtgc 300  
 24 caccggcgag gtgttggtggg actggcagtg gcagcaattg tggcccgcca cgccggagaa 360  
 25 gacctgcgtc gtgtccctgc agtcgttgca cacgacccat ccctttcccg tgtacaagta 420  
 26 gcttgccctc atctctgcgt cgagggcctt gaagaacttg tccatgtcga agatgggcgt 480  
 27 ggcgcata 488  
 29 <210> SEQ ID NO: 2  
 30 <211> LENGTH: 466  
 31 <212> TYPE: DNA  
 32 <213> ORGANISM: Zea mays  
 33 <220> FEATURE:  
 34 <223> OTHER INFORMATION: Clone ID: LIB3136-003-D6-R1A  
 35 <400> SEQUENCE: 2  
 36 cggagcgtgg atcctgcccc gccaccacgc cgcggcacac aactgcacaa gccctcctca 60  
 37 gatctcaatc ccggcgctcc ctccctccct ccctcctcgc ctccggacag cgagcgccgc 120  
 38 cgtccgccgt ccatggagca cgacgcgag gcgcgccgcg ggttcgccag gatgggcttc 180  
 39 ggggtgcaagc actaccggag gcgatgccgg atccgcgcgc cctgctgcgg cgacgtcttc 240  
 40 cactgccgcc attgccacaa cgagtcacag aaagacgggc acgagctgga tcggcacgac 300  
 41 gtccaatcgg ttatctgcct cgtctgtgac accgagcagc cgatcgcgca ggtgtgctgc 360  
 42 aactgcggcg tctgcatggg ggagtacttc tgcgcacctg caacttcttg gacgatgacg 420  
 43 ttgacaagga gcagttccat tgccacgatt gcggcatctg cagagt 466  
 45 <210> SEQ ID NO: 3  
 46 <211> LENGTH: 486

## RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

47 <212> TYPE: DNA
48 <213> ORGANISM: Zea mays
49 <220> FEATURE:
50 <223> OTHER INFORMATION: Clone ID: LIB3136-018-G10-F1A
51 <400> SEQUENCE: 3
52      ccattataac agccataaat atttttgttta aatgcaggga gacaaattcc agggattatt      60
53      tactgcagca gcagtttaca gggaccgcca tcttctcttc cacctccaac accccccccac      120
54      cactttccca ggtgaaatgg caaaatttttc ccaacccaaaa aacgcatagt aaaaaccaat      180
55      cgggtaaatg atcttgcgac cgatcgaatg gacatggaac atgggtgtgt cgcctttgtt      240
56      cggtttcagg ctttcaatgc ggtgttcttg cagatggggc acacgttctt caccaccagc      300
57      cattgcttga tgcagccagc atggaagtgc tgcccgagc ccagcctccc gagatcgtct      360
58      ccatcaacgt actcctcctg gagagcgaga aagagcatga gtatgtatta gccttgttca      420
59      actgctaact tcattgcttt gtaacaaagc taggtgatgc agggagcatg ttcacaggcg      480
60      gaaagc                                         486
62 <210> SEQ ID NO: 4
63 <211> LENGTH: 472
64 <212> TYPE: DNA
65 <213> ORGANISM: Zea mays
66 <220> FEATURE:
67 <223> OTHER INFORMATION: Clone ID: LIB3136-018-G10-R1A
68 <400> SEQUENCE: 4
69      gcaggattca atcaccaaaaa cctcaccaga cgccatcctc gaaattttatc agaggtaatt      60
70      ttctccctcc attttttcgca ttttgttttc tccgtttttt ggtttttcagt ttgattgctc      120
71      atcttttcac caaaatatca agtagcgtca tacttgaaat ttgattgac atcttctcga      180
72      tttagctctt tattttctta taggagattg gtcgtctatc tggagcactc cgcggccatc      240
73      aacccccacg cttaagggtca gggtttctgt tggagcgtca gggcgatggt gtttggggcg      300
74      ttcctttatc aacaaggggt agagaaggaa gaaggttaat ggagattcgg aatgcacttg      360
75      aaatgattca aaggggggaa aatgtaaggc tcgagtctat cttctatggc ggcctcgaca      420
76      ttcatgacag acacagggac atgcgccttg acattgacaa tatgtcctat ga          472
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 498
80 <212> TYPE: DNA
81 <213> ORGANISM: Zea mays
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Clone ID: LIB3136-023-C2-F1A
84 <400> SEQUENCE: 5
85      tttttatttt tttttttttt tttttttttt ttttaatgac aatgaacaca attattcctt      60
86      gtcgattgaa caatagttta catcatggta caaactgaaa accagcgtgc gctcacatgc      120
87      atccggacac cttaaaggta ccggcggcgc ctccctcact tgccggggac gaagttgggtg      180
88      gcgtaggccc aagcgttggt gttgacgggg tcggcaaatgt ggtcagcgag gttctcgagc      240
89      gggcccttcc cgtgacgat ggcctggacg aagaatccga acatggagaa catggcgagg      300
90      cggccgttct tgagctcctt caccttgagc tcggcgaagg cctcggggtc gtcggcgagg      360
91      ccgagcgggt cgaagctgcc accggggtag agcgggtcga cgacctcgcc gagcggaccg      420
92      ccggcgatgc ggtaccctcg acggcgccca tgagcacgac ctggcaggcc cagatggcaa      480
93      ggatgctctg cgcgtgga                                         498
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 472
97 <212> TYPE: DNA
98 <213> ORGANISM: Zea mays

```

## RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

## 99 &lt;220&gt; FEATURE:

100 &lt;223&gt; OTHER INFORMATION: Clone ID: LIB3136-023-C2-R1A

## 101 &lt;400&gt; SEQUENCE: 6

102	cgatctgcaa	gtctcgctac	gtagcagtg	aatacaaaaa	aagcagccgc	aatggcgagc	60
103	agcaccatgg	ccctctcctc	cacggccttc	gccggcaagg	ccgtgaacgt	gccgtcgtcg	120
104	tccgccttcg	gcgaggcccg	cgtgacgatg	cgcaagacgg	cggcgaaggc	caagcctgcg	180
105	gcggcgctccg	ggagcccgtg	gtacggcccc	gaccgcgtgc	tgtacctggg	cccactgtcc	240
106	ggcgagccac	cgagctacct	gacgggcgaa	ttccccggcg	actacggctg	ggacaccgcg	300
107	gggctgtcgg	cggaccgcga	gacgttcgcc	aagaaccggg	agctggaggt	gatccactcc	360
108	cgctggggcca	tgtctgggcg	gctcggctgc	gtcttccccg	agctgctcgc	ccgcaacggc	420
109	gtcaagttcg	gcgaggccgt	gtggttcaag	gccggctccc	agatcttcag	cg	472

111 &lt;210&gt; SEQ ID NO: 7

112 &lt;211&gt; LENGTH: 417

113 &lt;212&gt; TYPE: DNA

114 &lt;213&gt; ORGANISM: Zea mays

## 115 &lt;220&gt; FEATURE:

116 &lt;223&gt; OTHER INFORMATION: Clone ID: LIB3136-026-B3-R1A

## 117 &lt;400&gt; SEQUENCE: 7

118	cccacgcgtc	cgactagttc	tagatcgcca	tctaggacta	gtctgaagat	ccatgttctg	60
119	tctgccttga	taatccttct	gtgggtgata	gtatccgcca	tttgccttgc	tttcacaagt	120
120	tccataaaga	gtgtattgac	gagtggttta	ggagaaagaa	actgtgcccc	gtctgcaagt	180
121	ttgggattaa	ctgaagtttg	ccgtaccatt	ctacagtggg	gttctactta	gtagtggcat	240
122	cgacgaggtg	ctgcaatttc	tcatacggga	tgccttccctg	cagggaattg	gctgtgtcta	300
123	agataaaaata	aacaatgtat	tgctatgatc	tgcgcttttg	ggcatcattt	tgtatgcacg	360
124	cacgagtgtc	tgcgaggact	attatcgtaa	accaccaatt	cccataaatt	ggttacc	417

126 &lt;210&gt; SEQ ID NO: 8

127 &lt;211&gt; LENGTH: 408

128 &lt;212&gt; TYPE: DNA

129 &lt;213&gt; ORGANISM: Zea mays

## 130 &lt;220&gt; FEATURE:

131 &lt;223&gt; OTHER INFORMATION: Clone ID: LIB3136-033-F7-F1A

## 132 &lt;400&gt; SEQUENCE: 8

133	ctacgttcac	atatgtattt	taagcaggct	catgggcctt	tatcctcccc	ttactttaca	60
134	acataattcaa	gaatcgggga	aacaaaacca	tgcgtttttt	caatccgtat	gaaatgcttc	120
135	atcgtaaaaca	gcagtgccgg	tgtggctggc	ggaaacgcct	gatcgggtcaa	ggtttcagaa	180
136	accaagggtcg	tcgttagggc	cgggaccctg	accacccaga	ggggggccacg	gaagtcggga	240
137	ggatccggac	ccggggcata	cgaggtacgg	aaaatccggg	agccccctcg	gtttcagggg	300
138	ttggagtgtc	cgaaacggcg	gtatttgcag	tagcgggagc	cgcaacggga	gcagttcacc	360
139	aaatcctgcc	gaaccggggc	gtagcttatg	ggccctaagg	tgtataac		408

141 &lt;210&gt; SEQ ID NO: 9

142 &lt;211&gt; LENGTH: 378

143 &lt;212&gt; TYPE: DNA

144 &lt;213&gt; ORGANISM: Zea mays

## 145 &lt;220&gt; FEATURE:

146 &lt;223&gt; OTHER INFORMATION: Clone ID: LIB3136-033-F7-R1A

## 147 &lt;400&gt; SEQUENCE: 9

148	acaagggaaa	gattgcgctt	gcgcagtctt	gggcgccggc	cgcgaggtg	ccggttaatc	60
149	ttcgagagac	gcgagtcacg	cgactgctg	aagagtcaaa	aaggtgtgtg	tgtgtgagat	120
150	agagatgagg	ctccctatcc	tctcgcggta	acttggctag	gagagatagg	ggctgggaaa	180

## RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

151      gcgaatggtt ttcggaagg cgctgtgatt tgacctgtaa aggaagaacc ttcccttcct 240
152      ctccccgtcc ttgtccgact ctgtaccgc cctcagatcg gcgacgcggt tgtttcttcg 300
153      gcaacgggct aaaatgaggc tctcatcgtc gtccggcagc gtcctaccgg ctcagccggg 360
154      ctctccggaa gctgtgga                                     378
156 <210> SEQ ID NO: 10
157 <211> LENGTH: 485
158 <212> TYPE: DNA
159 <213> ORGANISM: Zea mays
160 <220> FEATURE:
161 <223> OTHER INFORMATION: Clone ID: LIB3136-044-H10-F1A
162 <400> SEQUENCE: 10
163      caaaacaaaa caactcaaat cctttattat ttggaccatt attccagaac gagaagggat 60
164      ggcgtctcct ttttgatcac ccatccctca caaaaggggt aacatcaaag tacatacaaa 120
165      aaaccataaa gagaaaaaaa gtcaagagaa aaaaaaaatg tgcggggcga atgggatcaa 180
166      cagccctctg ataatggagc ctaccacaaa tcacgtagaa gatatatggc tggctggcat 240
167      caagatctac ggggtgcggc aaaacagagg aggacaagac gatcaacgga gtgattagct 300
168      tggcactaat aatccgcccc aatcacaaaga tcacacaacc ctgagatagg cctgcaatcg 360
169      ttcggcagtc actgtgcagg gggtagcttg tatgtacact gctgatctgg cgttggaggg 420
170      tccttatcca tgaagcaacg tggatgtggg cgaagaagat agggatcatca gcagcagagc 480
171      agcct                                     485
173 <210> SEQ ID NO: 11
174 <211> LENGTH: 489
175 <212> TYPE: DNA
176 <213> ORGANISM: Zea mays
177 <220> FEATURE:
178 <223> OTHER INFORMATION: Clone ID: LIB3136-055-C12-F1A
179 <400> SEQUENCE: 11
180      aatagaacag cacacagtat gttatatata tagcctgac tacacataca gccgcatgct 60
181      gtatatacat acacacacgg caaaaaacac acacacatgc cccacccgtt catccttggt 120
182      atggaacaaa aaaatgtaag atgcggcata aaacacacat gttataagtt ccatactaca 180
183      atgggcaaaa ctggaggggc gcagagaata aagaaaaagg cgcataaact tgcaacatgt 240
184      cggtcgagca aaccaagcta tcctaaagct gcttattaag atatattgtac atacgcatcg 300
185      ccttgctcct gagtgtgacg actccaaacg accttcttgc cttcaggcca gccagctgct 360
186      tctctcactt gctcgttatc atgaacggga gatgaacccg ggaagagccc gacttttgat 420
187      ccatgcttga ggcacccgaa gagagcaacc tcctatgctc cctcaaagtt ggactagttt 480
188      aggggtgatg                                     489
190 <210> SEQ ID NO: 12
191 <211> LENGTH: 474
192 <212> TYPE: DNA
193 <213> ORGANISM: Zea mays
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Clone ID: LIB3136-055-C12-R1A
196 <400> SEQUENCE: 12
197      cggacgctgg tcgcacggca gccgatggtg tcgatgagct cgacgccgca ccctctggat 60
198      ccgtccgtcc cgccgctcgt ggggtacggc aaggaggagg aggaggcggt ggagtcctgt 120
199      gccgccgccg cgcccttgcc gccggttggg atcgacgacg acgaggaggg cccccggaga 180
200      gtgcgcaacc ctacaccatc accaagtcgc gcgagagctg gaccgacccc gagcacgaca 240
201      agttcctcga ggcaactgcg ctctttgacc gtgactggaa aaagattgaa gcatatgttg 300
202      gctccaagac agtaatacag attaggagtc acgcacagaa gtactttttg aaggttcaaa 360

```

## RAW SEQUENCE LISTING

DATE: 07/09/2002

PATENT APPLICATION: US/09/692,257A

TIME: 14:03:41

Input Set : N:\paola\US09692257A.RAW

Output Set: N:\CRF3\07092002\I692257A.raw

```

203      agaatggaac aggtgagcat ttgccccac ctaggccaaa gcgaaaggct gcccatccat 420
204      atccacacaa gtcctcaaaa aaggcccttc aagttgtctt accacaacaa gttt      474
206 <210> SEQ ID NO: 13
207 <211> LENGTH: 364
208 <212> TYPE: DNA
209 <213> ORGANISM: Zea mays
210 <220> FEATURE:
211 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D5
212 <400> SEQUENCE: 13
213      ttgccccctg taccttattc atctggggcc tctactatta gttcgagact cggcgctttt 60
214      ctggggtgtg gatctatcaa agcaacattt gctttggtat ggttatgatc gcaagaatgg 120
215      agttcattcc ctctgtccag ctatatggtc aaatcatagg agatggctga tgatgtcaat 180
216      gatgtgtctc aatccaatat cttgttcgtt tatggatctg cattttccta ttgggcaact 240
217      aacatatgtt gcttggtgaa ggaatataac ccgtggcttt ctccctttat ttggtggctt 300
218      gcttcaagcc taatggaata tttccctgta gaaccaaata atgattcttt tctttgcata 360
219      aata      364
221 <210> SEQ ID NO: 14
222 <211> LENGTH: 334
223 <212> TYPE: DNA
224 <213> ORGANISM: Zea mays
225 <220> FEATURE:
226 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D6
227 <400> SEQUENCE: 14
228      caccactccc aagccagtac cgagtcctac gagcagtcgc acgcaagtgt caagagacga 60
229      aacggtcgac atggctcgca cgcaatctgc cgtagcggtc gccgtgggtg ccgcggtgct 120
230      gctgctggca gcggcggcga cgacctcgga ggccgccatc acctgcgggc aggtgagctc 180
231      cgccatcgcg ccctgcctct cctacgcccc cggcacgggg tccgccccct ccgcgtcctg 240
232      ctgtagcggc gtcaggaacc tcaagagcgc cgccagcacc gccgccgaca ggcgtgccgc 300
233      ctgcaactgc ctcaagaacg ccgccagggg cgtc      334
235 <210> SEQ ID NO: 15
236 <211> LENGTH: 358
237 <212> TYPE: DNA
238 <213> ORGANISM: Zea mays
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D7
241 <400> SEQUENCE: 15
242      ctgaggccct tgagattacc cgcaagttca tgaacaaacc agtgagaatt cttgtgaaga 60
243      gagatgagct gacccttgag ggtatcaagc agttctatgt gaatgtggac aaggaagact 120
244      ggaagctgga cacactgtgt gacctgtatg agaccctggc cattaccag agtgtcatct 180
245      ttgtcaacac ccgccgcaag gtggactggc tctactgaaa gatgaggagc agggaccaca 240
246      ccgtttctgc cactcatggt gacatggacc agaacactag agacatcatc atgagggagt 300
247      tccggtctgg ctccctccgt gtgctcatca ccactgacct gcttgctcgt ggtattga 358
249 <210> SEQ ID NO: 16
250 <211> LENGTH: 304
251 <212> TYPE: DNA
252 <213> ORGANISM: Zea mays
253 <220> FEATURE:
254 <223> OTHER INFORMATION: Clone ID: LIB3136-059-Q1-K1-D8
255 <400> SEQUENCE: 16

```